

Abstract of the Disclosure

A nitride semiconductor device has a nitride semiconductor layer structure. The structure includes an active layer of a quantum well structure containing an indium-containing nitride semiconductor. A first nitride semiconductor layer having a band gap energy larger than that of the active layer is provided in contact with the active layer. A second nitride semiconductor layer having a band gap energy smaller than that of the first layer is provided over the first layer. Further, a third nitride semiconductor layer having a band gap energy larger than that of the second layer is provided over the second layer.